

A SYNOPSIS OF THE AMERICAN SPECIES OF SCOLIONEURINAE.

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The European species of this subfamily were originally referred to the genus *Blennocampa*. Konow in 1886 removed one of the species from *Blennocampa* under the generic name of *Entodecta* and in 1890 the remaining species under the name of *Scolioneura*. These genera, he has associated with *Blennocampa* and its allies under the tribal name of Blennocampides¹ in his last analysis of the group. The first American species was described by Norton in 1867 as *Sclandria capitalis*, later, 1895, referred to *Scolioneura* by Marlatt² and two new species described. S. A. Forbes³ in 1885 described *Metallus rubi* from two male specimens bred from larvae mining in the leaves of cultivated blackberries. This species was referred to the genus *Fenusa* by Cresson⁴ in 1887 as a possible variety of *Fenusa curta* Nort. Konow in the *Genera Insectorum*, evidently on the authority of Cresson, makes *Metallus* a synonym of *Fenusa* and adopts *rubi* as a good species. An examination of Forbes's type proves it to belong to the Scolioneurinae. Since *Metallus* antedates both *Entodecta* and *Scolioneura*, if it should be found later that only two generic names can be retained in this subfamily, *Metallus* will have to be used for one of them. A fifth species was added by Kincaid⁵ in 1900 from Alaska under the name of *Fenusa alaskana*, a species of *Entodecta*. Finally a sixth species was described by Konow⁶, *Entodecta humilis*, from Alaska in 1908. The present writer in 1906⁷ separated *Scolioneura* and *Entodecta* from the Blennocampides as a distinct subfamily, based on the divergent condition

1. Konow, F. R. W.—*Genera Insectorum*. Hymenoptera, Family Tenthredinidae. Fascicule 29, 1905, 76–90.

2. Marlatt, C. L.—The American species of *Scolioneura* Knw. *Proc. Ent. Soc. Wash.*, III, 1895, 234–236.

3. Forbes, S. A.—Fourteenth report of the state entomologist on the noxious and beneficial insects of the state of Illinois. Springfield, 1885, p. 87, pl. IX, fig. 7.

4. Cresson, E. T.—Synopsis of the families and genera of the Hymenoptera of America, north of Mexico. Philadelphia, 1887, p. 160.

5. Kincaid, Trevor. Papers from the Harriman Alaskan expedition. VII. The Tenthredinoidea. *Proc. Wash. Acad. Sci.* II, 1900, 345.

6. Konow, F. R. W.—*Zeit. System. Hymen. Dipter*, VIII, 1908, 84–85.

7. MacGillivray, A. D.—A study of the wings of the Tenthredinoidea, a superfamily of Hymenoptera. *Proc. U. S. Nat. Mus.*, XXIX, 1906, 649.

of the medio-cubital cross-vein and the free part of M_{3+4} in the front wings and from the Fenusinae, another small group of genera included in the Blennocampides by Konow, by the form of the cell R_{1+2} of the hind wings. The cell R_{1+2} being closed throughout and appendiculate at apex and with vein R_3 reaching the margin of the wing distinctly before the apex in the Scolioneurinae and the cell R_{1+2} rounded at apex and open and the vein R_3 reaching the margin of the wing at or beyond the apex in the Fenusinae.

Konow⁸ describes the larvae of five species, all are leaf-miners, two are found on *Betula*, one on *Tilia*, one on *Geum*, and one on *Rubus*. In addition to the record of Forbes of *Metallus rubi* as a leaf-miner on *Rubus* as given above, Houghton⁹ has reported a species on *Rubus* from Delaware of which specimens were named by the writer as *Scolioneura capitalis* Nort.

This subfamily can be differentiated from its congeners as follows:

SCOLIONEURINAE.

Head transverse; the clypeus long, never deeply emarginate; the antennae with nine segments; the eyes oval in outline, the inner margin straight or uniformly convex, adjacent to the base of the mandibles; front wings with the radial cross-vein, the radio-medial cross-vein usually, and the free part of R_4 and R_5 present; the medio-cubital cross-vein joined to $Sc_2 + R + M$ at or near the origin of the free part of media; the medio-cubital cross-vein and the free part of M_{3+4} strongly divergent behind; the free part of $M_1 + Cu_1$ arising at or near the middle of the cell M_1 ; the free part of media and the radial sector straight or gently curved near their origin, not strongly bowed; the medio-cubital cross-vein strongly bowed and joining cubitus about midway between the origin of cubitus and the point of separation of M_3 and M_4 ; the hind wings with the cell R_{1+2} closed and appendiculate at apex, very rarely open; the vein R_3 reaching the margin of the wing distinctly before its apex; the free part of R_4 and the transverse part of M_2 wanting; the second anal cell distinctly petiolate; the claws appendiculately toothed.

8. Konow, F. R. W.—Systematische Zusammenstellung der bisher bekannt gewordenen Chalastogastra. Zeit. Syst. Hymen. Dipter. I, 1901, 228-229.

9. Houghton, C. O.—The Blackberry Leaf-miner. Entom. News, XIX, 1908, 212-216.

GENERA OF SCOLIONEURINAE.

- a. Front wings with the radial cross-vein and the free part of R_4 interstitial; the antennal furrows practically continuous throughout. **Scolioneura** Knw.
- aa. Front wings with the radial cross-vein and the free part of R_4 widely separated; the antennal furrows broadly interrupted on the middle of the front.
- b. Antennae with the second segment distinctly longer than broad; the first and second segments together as long as or longer than the third **Parabates** n. gen.
- bb. Antennae with the second segment annular, broader than long; the first and second segments together shorter than the third.
- c. Eyes with their inner margins straight and parallel, not converging below; the front distinctly wider than high. **Polybates** n. gen.
- cc. Eyes with their inner margins uniformly convex and converging below; the front not as wide as high.
- d. Front wings with the free part of R_4 and the radial cross-vein inclined at different angles. **Metallus** Forbes
- dd. Front wings with the free part of R_4 and the radial cross-vein inclined at approximately the same angle. **Entodecta** Knw.

Scolioneura Knw.

Head transverse, the front distinctly broader than high; the inner margin of the eyes straight and parallel, the eyes not converging below; the antennal furrows deep and distinct, practically continuous from the antennal fovea to the occiput; the clypeus squarely truncate, distinctly more than half as wide at apex as at base; the antennae long and filiform, the second segment shorter than the first, broader than long, globular, not annular, the first and second segments together shorter than the third; front wings with the free part of R_4 and the radial cross-vein interstitial and inclined at the same angle; the free part of M_{4+Cu_1} received at or beyond the middle of the cell 1st $A + 2nd$ 2nd A ; media strongly angular at the point of separation of M_{1+2} and M_{3+4} . Type *Tenthredo betuleti* Klg.

This generic name as here used is restricted to those species in which the radial cross-vein and the free part of R_4 is interstitial. The generic diagnosis is based on a specimen of the type species identified by Dr. Fr. W. Konow. For a further discussion of the characters used for this genus see under *Entodecta*.

Scolioneura populi Marl.

Body whitish with the following parts black: the antennal furrows, the antennal fovea, a spot around the anterior ocellus, a transverse band on the postocular area, the antennae beyond the first segment, a spot on the median and lateral lobes of the mesonotum, the scutellum, the metathorax, the apex of the pectus, the abdomen above,

and the saw-guides; antennae not thickened at middle, the first and second segments globular, subequal in length, together five-sixths the length of the third, the third as long as the fourth and fifth together, the fourth slightly longer than the fifth, the fifth and sixth subequal and each slightly longer than the seventh, eighth and ninth, which are subequal, the ninth with parallel sides and a bluntly rounded point; the clypeal foveae deep and prominent; the supraclypeal* area slightly convex and not prominent; the antennal furrows deep, prominent, extending from the clypeal fovea to the occiput, and almost straight; the median fovea an inverted wedge-shaped depression, longer than broad; the postocellar area convex, well separated; the interocellar furrow distinct, continuous, straight; the ocellar basin fan-shaped, connected with the interocellar furrow; the posterior metatarsus shorter than all the following segments together; the second and third segments of the tarsi subequal; the front wings with the free part of R_4 twice as long as the free part of R_5 ; the stigma convex below, about three times as long as broad, angled at the point of attachment of the radial cross-vein; the veins, including the costa and the stigma, luteous; the saw-guides moderately robust, truncately rounded, and somewhat pointed at the upper apical angle. Length 4 mm.

Habitat.—Las Cruces, New Mexico. Described from two females received from Prof. T. D. A. Cockerell.

The male according to Marlatt does not differ except in having a greater percentage of white or brownish white on the body.

Parabates n. gen.

Head transverse, front not as broad as high; the inner margin of the eyes uniformly convex, the eyes distinctly converging below; the antennal furrows obsolete except adjacent to the antennal foveae and behind the lateral ocelli; the clypeus squarely truncate, distinctly more than half as wide at apex as at base; the antennae long and filiform, the second segment as long as the first, longer than broad, as wide as the first segment, not annular, the first and second segments together as long as or longer than the third; the front wings with the free part of R_4 and the radial cross-vein not interstitial and inclined at the same angle; the free part of $M_4 + Cu_1$ received at the middle of the cell 1st A + 2nd 2nd A; media strongly angular at the point of separation of M_{1+2} and M_{3+4} ; the radial sector strongly bowed at base. Type *Parabates histrionicus* n. sp.

*Marlatt in his monograph of the Nematinae uses the term hypoclypeal plate for this area and the writer has referred to it thus far as the hypoclypeal area. The word hypoclypeal is a misnomer, meaning below instead of above the clypeus, it is also a hybrid in origin and should be discarded.

Species of Parabates.

- a. Vertical portion of the antennal furrows punctiform, only slightly longer than wide..... **histrionicus** n. sp.
 aa. Vertical portion of the antennal furrow not punctiform, extending from the occiput to beyond the lateral ocelli..... **inspiratus** n. sp.

Parabates histrionicus n. sp.

Body black with the knees, the front and middle tibiae and their tarsi, and the posterior tibiae and metatarsi, white or infuscated; the antennal furrows deep above and below, interrupted on the middle of the front, the lower ends connecting with a broad, deep antennal fovea, extending to opposite the middle of the median fovea, interrupted by a transverse ridge not completely filling the furrow, the furrow punctiform above the ridge, longer than broad, the vertical portion punctiform, not extending beyond the lateral ocelli, slightly longer than wide; the postocular area very wide and very short, depressed below the area in front of the interocellar furrow; the interocellar furrow faint; the middle of the front uniformly convex, the ocellar basin practically wanting, a slight depression around the median ocellus and connected with the interocellar furrow by a very fine furrow; the median fovea deep, with broadly inclined sides, longer than broad; the supraclypeal area strongly elevated between the antennae, ridge-like, uniformly convex below the median fovea; the antennae slender, the first and second segments globular, subequal in length, together slightly longer than the third segment, the third as long as the fourth and fifth together, the fourth and following segments subequal in length, the ninth segment gradually narrowed toward the apex, pointed on one side, the fourth and following segments slightly serrate on one side, all the segments densely hairy; the clypeus truncate at apex; the wings slightly infuscated, the veins and the costa black, the stigma except on its front margin brownish, a fuscous band between the tip of the third anal vein and the base of the cell 1st A + 2nd. 2nd. A.; front wings with the free part of R_4 three times as long as the free part of R_5 ; the stigma broadly rounded below, truncate at apex, twice as long as wide, broadest before the middle; the posterior metatarsus shorter than all the following segments together, the second segment twice as long as the third; the saw-guides straight on the upper margin, convex below, obliquely, convexly truncated at apex, with a blunt point at its upper angle, the surface polished, the apex and the lower margin fringed with setae longer than the width of the saw-guides. Length 3 mm.

Habitat.—Olympia, Washington (Trevor Kincaid); Colorado (C. F. Baker); and Nevada. Type in the collections of Cornell University and paratypes in the collections of the U. S. National Museum.

***Parabates inspiratus* n. sp.**

Body black with the knees, the tibiae, and the tarsi infuscated; the antennal furrows deep and broad, above and below, interrupted on the middle of the front, the lower ends connecting with the antennal fovea, transversely divided by a ridge just above the base of the antennae, the portion above the ridge punctiform, deep and broad, the vertical portion deep, extending from the occiput to beyond the lateral ocelli, much longer than wide, the interocellar furrow distinct; the ocellar basin depressed around the median ocellus, with a broad furrow extending from this basin to the interocellar furrow; the median fovea broad, rather shallow, narrower than the space between the antennae; the supraclypeal area convex and prominent; the antennae slender, the first and second segments globular, subequal in length, together subequal in length to the third, the third twice as long as the fourth, the fourth and following segments subequal in length, all the segments densely hairy; the wings slightly infuscated, the veins, including the costa and the stigma, brownish, not with a fuscous band between the tip of the third anal vein and the base of the cell 1st A + 2nd. 2nd A; the posterior metatarsus subequal in length to the four following segments; the saw-guides convex above and below, rounded at apex below and forming an evenly rounded point above, the entire surface coarsely and closely punctured, covered with fine, short setae. Length 4 mm.

Habitat.—Nevada. Type in the collections of the U. S. National Museum.

***Polybates* n. gen.**

Head transverse, the front distinctly broader than high; the inner margin of the eyes straight and parallel, the eyes not converging below; the antennal furrows obsolete except behind the lateral ocelli; the clypeus slightly, broadly emarginate, distinctly more than half as wide at apex as at base; the antennae long and filiform, the second segment much shorter than the first, annular, not as wide as the first, broader than long, the first and second segments together shorter than the third; the front wings with the free part of R_4 and the radial cross-vein not interstitial, inclined at the same angle; the free part of $M_1 = Cu_1$ received distinctly before the middle of the cell 1st A + 2nd. 2nd A; media gently curved at the point of separation of M_{1+2} and M_{3+4} ; the radial sector almost straight, slightly oblique, at base. Type *Polybates slossonae* n. sp.

Polybates slossonae n. sp.

Body black with all the legs entirely white; the antennal furrows punctiform below, longer than wide, hardly more than a prolongation of the dorsal margin of the antennal fovea, the vertical portion of the antennal furrows punctiform behind the lateral ocelli and extending below the lateral ocelli for about the width of an ocellus; the post-ocellar area flat; the interocellar furrow distinct, broadly concave behind; the ocellar basin strongly convex, very slightly depressed in front of the median ocellus; the median fovea deep, punctiform, as broad as long, situated just above and between the bases of the antennae; the supraclypeal area uniformly, strongly, convexly elevated; the antennae slender, the second segment much shorter than the first, annular, the first and second segments together less than half the length of the third, the third segment very slightly longer than the fourth, the fourth, fifth and sixth subequal, the seventh, eighth, and ninth subequal and slightly shorter than the sixth, the ninth with straight sides uniformly rounded to a point at the middle of the apex, all the segments hairy; the wings hyaline, the veins, including the costa and the stigma, brownish; the front wings with the free part of R_4 about twice as long as the free part of R_5 ; the stigma over twice as long as wide, its hind margin uniformly, convexly rounded from base to apex; the posterior metatarsus three-fifths the length of all the following segments together, the second segment slightly longer than the third and one-third the length of the metatarsus; the saw-guides straight above and below, converging to a bluntly rounded point at apex. Length 3 mm.

Habitat.—Franconia, New Hampshire. Named for its collector, Mrs. Annie Trumbull Slosson. Type in the collections of Cornell University and paratype in the collections of the U. S. National Museum.

Metallus Forbes.

Head transverse, the front not as broad as high; the inner margin of the eyes uniformly convex, the eyes distinctly converging below; the clypeus squarely truncate, distinctly more than half as wide at apex as at base; the antennal furrows obsolete except adjacent to the antennal fovea and behind the lateral ocelli; the antennae long and filiform, the second segment distinctly shorter than the first, wider than long, more or less annular, the first and second segments together distinctly shorter than the third; the front wings with the free part of R_4 and the radial cross-vein not interstitial and distinctly inclined at different angles; the free part of M_4+Cu_1 received distinctly before the middle of the cell 1st $\Lambda+2nd\ 2nd\ \Lambda$; media gently curved at the point of separation of M_{1+2} and M_{3+4} ; the radial sector almost straight at base. Type, *Metallus rubi* Forbes.

The generic name *Metallus* has been practically disregarded since its publication in 1885. It is the earliest proposed name in the subfamily and will therefore take precedence over all others.

Species of *Metallus*.

- a. Stigma three times as long as broad; the front punctured around the base of the antennae.....**canadensis** Marl.
- aa. Stigma twice as long as broad; the front not punctured around the base of the antennae.
 - b. Front wings with the free part of M_1+Cu_1 joining the cell M_4 distinctly beyond the middle.....**capitalis** Nort.
 - bb. Front wings with the free part of M_4+Cu_1 joining the cell M_4 at middle.
 - c. Mesonotum and scutellum rufous.....**rohweri** n. sp.
 - cc. Mesonotum and scutellum black.....**rubi** Forbes

***Metallus canadensis* Marl.**

Body shining black with the median and lateral lobes of the mesonotum rufous and the labrum, clypeus, mandibles, antennae, angles of the pronotum, tegulae, four anterior legs below the bases of the coxae, and the trochanters, tibiae, and tarsi of the hind legs, orange-white; the head punctured around the base of the antennae, with a faint transverse furrow over the antennae; the antennal furrows not nearly complete; the lateral walls of the ocellar basin sharply defined but low; the ocellar basin well defined above and connected with the straight interocellar furrow, the interocellar furrow strongly continuous; antennae very short and stout, with the third segment not quite as long as the fourth and fifth together, the second segment as long as the first; the wings hyaline, iridescent, with the veins brown; front wings with the radio-medial cross-vein present; the free part of M_4+Cu_1 received near the middle of the cell M_4 ; the stigma about three times as long as wide; hind wings with the cell R_1+2 broadly open at apex; the saw-guides narrow, the upper margin straight, apex rounded, curved from the upper apex to the lower base. Length 4 mm.

Habitat.—Canada (Marlatt). Types in the collections of the American Entomological Society and of the U. S. National Museum.

Described from notes made by Mr. S. A. Rohwer for the writer from the type in the collections of the American Entomological Society.

***Metallus capitalis* Nort.**

Body reddish-yellow with the legs pallid and the head, the antennae beyond the second segment, the mesopleurae, the pectus, and the apex of the abdomen, piceous; the head with an indistinct transverse carina between the antennae; the antennal furrows distinct to about half the distance to the median ocellus; the median fovea present, the lower wall more distinct; the ocellar basin with the upper lateral walls not strong; the interocellar furrow not strongly continuous; the antennae rather long and slender, rather hairy, the third segment a little

longer than the fourth and not as long as the fourth and fifth together, the eighth and ninth subequal; the wings hyaline, the venation pale brown; the front wings with the radio-medial cross-vein represented only by minute rudiments; the free part of $M_4 + Cu_1$ received in the cell M_4 distinctly beyond its middle; the stigma twice as long as wide, angled at middle and at the point of attachment of the radial cross-vein; the hind wings with the cell R_{1+2} closed and appendiculate at apex; the saw-guides straight above, obliquely truncate, and rounded below. Length 3.5 mm.

Habitat.—Brooklyn, New York. Type in the collections of the American Entomological Society.

Described from notes made by Mr. S. A. Rohwer for the writer from the type.

The present synopsis was prepared for publication several months ago, it was not sent off because of the uncertainty felt as to the status of the species *canadensis*, *capitalis*, and *rubi*. My views regarding the validity of these species based on the data and specimens at hand were written up ready for publication and the description and notes were loaned to Prof. C. O. Houghton* and included by him in an article on "The Blackberry Leaf-Miner." The description there given is based in great part on the specimen described in this paper as *Metallus rohweri*. The careful study made of the types of *canadensis* and *capitalis* by Mr. Rohwer, together with the accumulation of several additional specimens has convinced me that I was in error and that all these forms should be ranked as distinct species.

Metallus rohweri n. sp.

Body black with the two basal segments of the antennae more or less, the middle and lateral lobes of the mesonotum, the scutellum, and its appendage, and the postscutellum, rufous; the legs with the trochanters, the knees, the front and middle tibiae and tarsi, the posterior tibiae, more or less infuscated toward the apex, and the posterior tarsi yellowish-white; the antennal furrows extending a short distance from the antennal fovea, interrupted and forming a deep well-like puncture, interrupted on the middle of the front to opposite the median ocellus, continued around the outer side of the lateral ocellus to the occiput, the vertical portion of the antennal furrows punctiform, longer than wide; the interocellar furrow deep and straight; the post-ocular area strongly convex and distinct; the ocellar basin elevated, flat, forming an indistinct pentagonal area, depressed in front of the median ocellus and a square depressed area behind connecting with the interocellar furrow; the supraclypeal area not strongly elevated, uniformly convex; the median fovea broad, deep, and prominent,

* Houghton, C. O.—Entomological News, XIX, 1908, 214.

slightly papillate at bottom, situated between and above the bases of the antennae; the antennae long and slender, the antennae with the first and second segments more or less annular, broader than long, subequal in length, much shorter than the third, the third longer than the fourth and shorter than the fourth and fifth together, the fifth and following segments subequal, the ninth segment broadly and rather sharply pointed; the wings, including the veins, the stigma, and the costa, brownish; the front wings with the radio-medial cross-vein present, hyaline; the free part of R_1 about twice the length of R_5 ; the free part of $M_4 + Cu_1$ received in the middle of the cell M_4 ; the stigma about twice as long as broad, obliquely truncate beyond the radial cross-vein and uniformly convex before it; the hind wings with the cell R_{1+2} closed and appendiculate; the posterior metatarsus slightly shorter than all the following segments together, the second segment one-half the length of the metatarsus and subequal in length to the third; the saw-guides straight above, convex below, obliquely truncated at apex, rounded at angle below, and sharply pointed at upper apical angle. Length 4.5 mm.

Habitat.—Block Island, Rhode Island (A. P. Morse, Collector); Missouri (?), larva on blackberry, Riley Collection.

Since the above was written two additional specimens have been received from Dr. F. H. Chittenden, bred by F. C. Pratt, from a leaf-miner collected on blackberry at Colmanville, Pennsylvania. These specimens are identical with the type specimen described above and one of them has been labelled as a paratype.

This species is named for Mr. S. A. Rohwer, to whom I am indebted for the notes on the described species of *Metallus* given above.

***Metallus rubi* Forbes.**

Body black with the trochanters, the knees, the front and middle tibiae and tarsi, the hind tibiae, though more or less infuscated, and the hind tarsi, white; the body color varies from brownish to jet black; the antennal furrows distinct above the base of the antennae, punctiform, varying from a deep well-like puncture to one with flaring sides, some individuals show another puncture on the margin of the antennal foveae, connected with it, and sometimes connected with the above described puncture above the bases of the antennae; antennal furrows obsolete on the front, line-like impressions behind the lateral ocelli, faint along their outer margin and distinct and finely punctiform in front of them; postocular area strongly convex, well separated; the interocellar furrow distinct, concave behind; the ocellar basin elevated, indicating a pentagonal area, flat or slightly convex on the outer surface, depressed close to the median ocellus, the depression connecting with the interocellar furrow; the median fovea situated between and above the bases of the antennae, circular, sometimes small and well-like, sometimes broad with flaring sides; the supraclypeal area uniform-

ly convex; antennae long and slender, the first and second segments together one-half the length of the third, the third longer than the fourth and shorter than the fourth and fifth together, the fifth and following segments subequal in length, the ninth segment strongly convex on the basal third and gradually, convexly, tapering to a point, the third and following segments more or less serrate on one side; the front wings with the radio-medial cross-vein present, hyaline, or wanting; the free part of $M_4 + Cu_1$ received near the middle of the cell M_1 ; the stigma twice as long as wide, broadly convex on the lower margin and at apex; the free part of R_4 twice the length of the free part of R_5 ; the hind wings with the cell R_{1+2} closed and appendiculate at apex; the wings varying from brownish to hyaline, the veins, stigma, and costa black or brown; the posterior metatarsus distinctly shorter than all the following segments together, the second segment longer than the third and almost half the length of the metatarsus; the saw-guides broad, straight above, convex below, obliquely truncate at apex, broadly rounded at lower angle, and rather sharply pointed at upper apical angle. Length 3-4 mm.

Habitat.—Illinois (Forbes); Dover, Delaware (Houghton); New York (Cornell Agricultural Experiment Station); River de Pere and Central Missouri, Riley Collection. Bred from larvae found on cultivated blackberry and on dewberry.

An extremely variable species in coloration and head structure. This may represent more than one species but the material at hand does not warrant its subdivision at the present time. The male differs only in its smaller size and in having the antennae more decidedly flattened and saw-toothed than in the female.

Entodecta Knw.

Head transverse, the front not as broad as high; the inner margin of the eyes uniformly convex, the eyes distinctly converging below; the antennal furrows obsolete except adjacent to the antennal foveae and behind the lateral ocelli; the clypeus slightly emarginate, not more than half as wide at apex as at base; the antennae long and slender, filiform, the second segment distinctly shorter than the first, wider than long, annular, not so wide as the first, the first and second together distinctly shorter than the third; the front wings with the free part of R_4 and the radial cross-vein not interstitial and inclined at the same angle; the free part of $M_4 + Cu_1$ received distinctly before the middle of the cell 1st $A + 2$ nd A ; media gently curved at the point of separation of M_{1+2} and M_{3+4} ; the radial sector almost straight, oblique at base. Type *Tenthredo pumila* Klg.

The generic diagnosis given above is based upon a specimen of the type species purchased from Dr. O. Staudinger and A. Bang-Haas. This diagnosis is entirely different from that given by Konow. He separated the genera *Scolioneura* and *Entodecta* on the position of the median ocellus, in the first genus this ocellus is said to be below a line drawn between the dorsal margins of the eyes and above in the later. Konow says of *Entodecta*: "Oeberkopf hoch über die Augentangenten emporsteigend; das unter Nebenaugen liegt noch über dieser Tangente" and of *Scolioneura*: "untere Ocelle unter den Augentangente." An examination of *Entodecta pumila* and *Entodecta gei*, the latter specimen received from Konow, shows this ocellus located distinctly below and not above the "Augentangente;" in fact it occupies the same position in all the species that I have examined and the character is therefore entirely worthless for the differentiation of these genera. The head is slightly more elevated behind the median ocellus in *Entodecta pumila* but not as wide as in *Scolioneura betuleti*.

The specimen of *Entodecta alaskana* Kincaid was not available for examination when the above description was prepared. *Entodecta humilis* Knw. is unknown to me and a copy of his description is given below. These species may not belong to *Entodecta* as here defined.

Species of *Entodecta*.

- a. Abdomen black; the tegulae and the legs beyond the middle of the femora brownish-white..... **alaskana** Kcd.
 aa. Abdomen fuscous; the tegulae black; the legs yellowish white. . **humilis** Knw.

***Entodecta alaskana* Kcd.**

Body black with the tegulae, the costa, the stigma, the wing veins, and the legs below the middle of the femora, brownish-white; the antennal furrows continuing as a shallow furrow from the clypeal fovea to the occiput, expanding above the bases of the antennae into a pit twice as long as broad, ending in a circular pit behind the lateral ocelli, extending in front of the lateral ocelli as a deep furrow about the width of an ocellus; the postocellar area short, the interocellar furrow shallow; the ocellar basin a V-shaped depressed area around the median ocellus, joining the interocellar furrow behind; the cheeks convex, not at all declivous; the malar space usually broad; the supraclypeal area prominent, strongly arched; the median fovea inconspicuous, elongate, about one-fourth the width of the space between the antennae; the antennae with the second segment elongated, about one-half the length of the first, the third segment as long as the fourth and fifth together;

the posterior metatarsus as long as the two following segments together; the front wings with the radial cross-vein almost interstitial with the free part of R_4 . Length 4 mm.

Habitat.—Kukak Bay, Alaska. Description drawn from Kincaid's unique type.

Entodecta humilis Knw.

“Niger; abdomine fusco; labro, palpis, pedibus flavescenti-albidis; unguiculis subfuscis; antennarum 2 articulis basalibus e fusco lutescentibus; alis fuscenti-hyalines; venis et stigmatibus fuscis.

Parvus, nitidus; capite et thorace pilis tenuibus, brevibus, sparsis obsitis; capite pone oculos fortiter angustato; clypeo apice truncato; antennis gracilibus, compressiusculis, breviter cano-pilosulis, truncum longitudine fere aequantibus; fronte puncto impresso supraantennali ornata; area frontali deleta; vertice brevi, longitudine sua duplo latiore. Lng. 3.5 mm.

Patria: Alaska (Sitka).

Von Herrn *F. Sahlberg* gesammelt. Die Art unterscheidet sich von den verwandten durch den nicht ausgerandeten sondern gerade abgestutzten Clypeus sowie durch die kleine tiefe punktförmige Supraantennalgrube, und ist unter den bisher bekannten 4 Arten der Gattung die kleinste.”